SPECIAL WATER SWI-TEC® INNOVATION

Repair Instructions

SWI-TEC

Anchor Buoy

SWI-TEC®

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Anchor Buoy – Repair Instructions

1a: Insert end of belt (the end without the loop) through the exit guide.
1b: Secure the belt to the drum with a self-tapping screw.
1c: Wind belt clockwise onto drum.

Note: keep the belt tensioned by occasionally pulling it tight onto the drum.

2a: Install the machine screw (M6 x 60) through the exit guide assembly with the counter-sunk head on the belt side.
2b: Mount the plastic shim and the spring coil bea ring onto the machine screw installed on the exit guide assembly.

3a: Support the spring coil on a suitable platform so that the spring coil and the slot in the center hub are at the same height.
3b: Make sure that the spring coil orientation is exactly as shown in the picture.

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4a: Push the end of the spring coil into the slot of the hub.
4b: Secure the end of the spring coil with the M4 set-screw with a 2mm Allen wrench.

5: Hold the spring coil tight against the hub leading the spring in a clockwise direction away from the slot in the hub.
6: Use a hammer to bend the spring coil so that the end exits the slot in the hub and is in close and even contact with the hub.

7: Hold the spring coil tightly and wind it 2 to 3 times around the hub.

Note: observe the number of windings: 2 to 3 – no more and no less).

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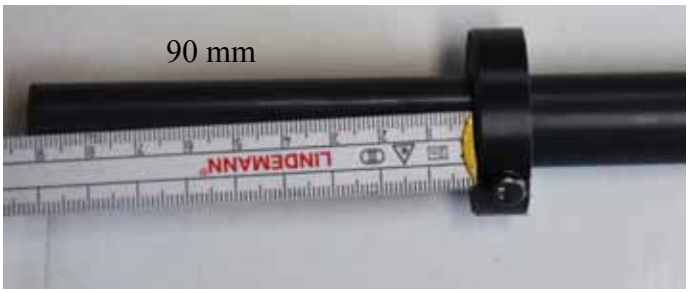
8a: Use the palm of your hand to secure the spring coil in place on the hub.
8b: Carefully mount the spring coil onto the spring coil bearing previously installed on the exit guide assembly with the machine screw.

Note: ensure that the plastic shim is still in place.

9: At this point you no longer need to secure the coil spring with the palm of your hand. Do not move the assembly until the next step is com pleted to prevent the spring coil from becoming dislodged.

10: Mount the L-shaped guide arm onto the ma chine screw, install a flat washer and the M6 self-locking nut; do not tighten at this time.

11: At this point the spring coil is secured and the assembly can now be moved as necessary to accomplish the next steps in the assembly procedure.



12a: Grasp the assembly with your left hand as shown in the picture holding the guide arm and the spring coil at the same time.
12b: Insert the axle from the right hand side as shown in the picture.

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13: Push the axle through hub and guide arm until the retaining collar is seated against the end plate of the belt reel.

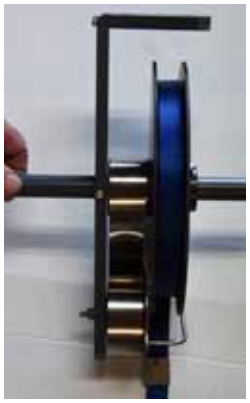
Note: you should be able to rotate the axle freely in the hub. If excessive friction is obser ved use sand paper to open up the bore in the hub as necessary.

14a: Turn the assembly over and hold between your knees as shown in the picture.
14b: Tighten the M6 self-locking nut previously installed in step 10.

Note: do not over tighten the nut. Check that the spring coil is free to rotate, otherwise loosen the nut as necessary.

15: Use a feeler gauge to set the retaining collar to provide a clearance of 1mm (3/64 in).

Note: make sure that the belt reel and spring coil assembly are able to rotate freely. Increase the clearance if necessary.



16: Use WD40 or similar spray lubricant to lubrica te the spring coil.

Note: this will improve the service life and per- formance of the spring coil.

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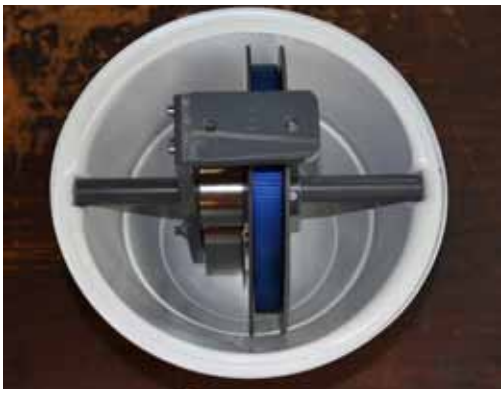
17: Pull out a length of the belt and slowly release it while checking that the belt retracts smoothly and rolls up onto the belt reel.



18: Insert the assembly into the lower housing.

<u>Caution</u>: the exit slot is offset! The assembly must be inserted so that the exit guide is in line with the exit slot at the bottom of the lower housing and the belt runs straight off the reel through the slot. The axle will rest evenly in the saddles at the upper end of the lower housing.



19a: Verify proper alignment of the exit guide with the exit slot in the bottom of the lower housing and that the axel is fully seated in the saddles at the upper end of the lower housing.


19b: Apply the ribbon sealer (Art. 1023) evenly around the lip of the upper end of the lower housing.

Note: make sure that the ends of the ribbon sealer are fully connected. If the mating surfaces of the upper and lower housing do not form an air-tight seal then the Anchor Buoy will not float!

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20: Carefully place the upper housing onto the lower housing.

Caution: make sure that the D-ring bolts line up properly with the holes in the top of the guide arm.

21a: Push the upper housing firmly down onto the lower housing.

21b: Use a mallet to install a crimp clip (Art. 1024) to secure the upper and lower housing together. Install the next crimp clip diagonally across from the previous location.

Note: upper housing will seat inside the lip of the lower housing.

22: Use a mallet to install the remaining crimp clips as in step 23b evenly spaced 60o apart from each other.

Note: the even spacing provides proper seating of the two housings and ensures an air-tight seal.

23a: Suspend the Anchor Buoy and pull out the entire length of the belt. Slowly allow the spring coil to wind up the belt.

Caution: do not pull with excessive force once you reach the end of the belt.

Caution: Keep some tension on the belt to prevent the belt from jumping off the reel.

24: Place the U-channel edge protection over the joint of the two housings.

25: Test the fully assembled Anchor Buoy by pushing it completely under water for sever al minutes. There should not be any air bubbles escaping from the joint between the upper and lower housing or from the D-ring at the top. If air bubbles are observed then the Anchor Buoy must be disassembled and the affected area must be resealed.

Your SWI-TEC Anchor Buoy is once again ready to serve you well on your future cruising adventures.
Please do not hesitate to contact your SWI-TEC representative if you have any questi-ons or comments.

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